

WHAT IS CLAIMED IS:

1. An information output apparatus for outputting recording information as well as copy control information to an information
5 recording apparatus for recording the recording information and copy control information into a recording medium, said copy control information indicating the number of times the recording information can be recorded, said information output apparatus comprising:

a multiplexing device for multiplexing the copy control information
10 and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and

an output device for outputting the multiplexed recording information and copy control information to the information recording
15 apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium.

2. The information output apparatus according to Claim 1, wherein
the information recording apparatus records the output recording
20 information and copy control information into the recording medium, without modifying the copy control information.

3. The information output apparatus according to Claim 1, wherein
the copy control information indicates that further recording is
25 prohibited after said recording in the information recording apparatus is completed.

4. The information output apparatus according to Claim 1, wherein the output device outputs the multiplexed recording information and copy control information to the information recording apparatus through an electric communication line.

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5. The information output apparatus according to Claim 4, wherein the electric communication line is at least any one of the Internet line, a ground wave digital line, a satellite communication line, and a cable television line.

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6. The information output apparatus according to Claim 1, wherein the output device further comprises a converting device for converting the multiplexed recording information and copy control information into a recording information and copy control information in conformity with a recording format used for recording the information into the recording medium in the information recording apparatus, to output the converted information to the information recording apparatus, when outputting the multiplexed recording information and copy control information to the information recording apparatus at the output speed.

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7. An information recording apparatus for recording copy control information and recording information into a recording medium, said copy control information and recording information output from an information output apparatus for outputting the recording information as well as the copy control information indicating the number of times the recording information can be recorded, to the information recording apparatus, said information output apparatus comprising: a

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multiplexing device for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and an output device for outputting the multiplexed recording information and copy control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium, said information recording apparatus comprising:

an obtaining device for obtaining the output recording information and copy control information; and

a recording device for recording the obtained recording information and copy control information into the recording medium, without modifying the copy control information.

8. The information recording apparatus according to Claim 7, wherein

the recording device records the recording information and copy control information in conformity with the recording format into the recording medium, without modifying the copy control information, when the recording information and copy control information is output at the output speed.

9. An information output recording system including an information output apparatus for outputting recording information as well as copy control information indicating the number of times the recording information can be recorded, and an information recording apparatus, wherein

said information output apparatus comprises:

a multiplexing device for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and

an output device for outputting the multiplexed recording information and copy control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium, and

said information recording apparatus comprises:

an obtaining device for obtaining the output recording information and copy control information; and

a recording device for recording the obtained recording information and copy control information into the recording medium, without modifying the copy control information.

10. An information output recording system including an information output apparatus for outputting recording information as well as copy control information indicating the number of times the recording information can be recorded, and an information recording apparatus, wherein

said information output apparatus comprises:

a multiplexing device for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and

an output device for outputting the multiplexed recording information and copy control information to an obtaining device at an output speed higher than a reproducing speed of the recording information from the recording medium, and

5 said information recording apparatus comprises:

the obtaining device for obtaining the output recording information and copy control information to output the same to the information recording apparatus; and

10 a recording device for recording the output recording information and copy control information into the recording medium, without modifying the copy control information.

11. The information output recording system according to Claim 10, wherein

15 said information recording apparatus comprises:

a recognizing device for mutually recognizing the type of the devices between the obtaining device and the information recording apparatus; and

20 a recording control device for controlling the recording device so as to record the recording information and copy control information into the recording medium, only when recognizing that the recording information and copy control information has been output at the higher output speed from the obtaining device, based on the recognition result in the recognizing device.

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12. The information output recording system according to Claim 10, wherein

the obtaining device outputs the obtained recording information and copy control information to the information recording apparatus at the output speed, after performing encryption processing corresponding to only the output speed.

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13. The information output recording system according to Claim 12, wherein

said information recording apparatus comprises:

10 a determination device for determining whether or not the recording information and copy control information has been output from the obtaining device, according to the encryption processing in the output recording information and copy control information, and

15 a recording control device for controlling the recording device so as to record the recording information and copy control information into the recording medium, only when it proves that the recording information and copy control information has been output from the obtaining device at the higher speed, according to the determination result in the determination device.

20 14. The information output recording system according to Claim 12, wherein

said information recording apparatus further comprises:

a decoding device for decoding the output recording information and copy control information; and

25 a recording encryption device for recording the decoded recording information and copy control information into the recording medium,

after performing the predetermined encryption processing for recording on the information.

15. The information output recording system according to Claim 9,
5 wherein

the copy control information indicates that further recording is prohibited after said recording in the information recording apparatus is completed.

10 16. The information output recording system according to Claim 9, wherein

the output device outputs the multiplexed recording information and copy control information to the obtaining device through an electric communication line.

15 17. The information output recording system according to Claim 16, wherein

the electric communication line is at least any one of the Internet line, a ground wave digital line, a satellite communication line, and a
20 cable television line.

18. An information output method for outputting recording information as well as copy control information to an information recording apparatus for recording the recording information and copy
25 control information into a recording medium, said copy control information indicating the number of times the recording information can be recorded, the method comprising:

a multiplexing process for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and

5 an output process for outputting the multiplexed recording information and copy control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium.

10 19. The information output method according to Claim 18, wherein the information recording apparatus records the output recording information and copy control information into the recording medium, without modifying the copy control information.

15 20. The information output method according to Claim 18, wherein the copy control information indicates that further recording is prohibited after said recording in the information recording apparatus is completed.

20 21. The information output method according to Claim 18, wherein in the output process, the multiplexed recording information and copy control information is output to the information recording apparatus through an electric communication line.

25 22. The information output method according to Claim 21, wherein

the electric communication line is at least any one of the Internet line, a ground wave digital line, a satellite communication line, and a cable television line.

- 5 23. The information output method according to Claim 18, wherein
the output process further comprises a converting process for
converting the multiplexed recording information and copy control
information into a recording information and copy control information in
conformity with a recording format used for recording the information
10 into the recording medium in the information recording apparatus, to
output the converted information to the information recording apparatus,
when outputting the multiplexed recording information and copy control
information to the information recording apparatus at the output speed.
- 15 24. An information recording method for recording copy control
information and recording information into a recording medium, said
copy control information and recording information output by the
information output method for outputting the recording information as
well as the copy control information indicating the number of times the
20 recording information can be recorded, to the information recording
apparatus for recording the recording information and copy control
information into the recording medium, said information output method
comprising: a multiplexing process for multiplexing the copy control
information and the recording information, said copy control information
25 indicating said number of times to be indicated after said recording in
the recording information apparatus is completed; and an output
process for outputting the multiplexed recording information and copy

control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium, said information recording method comprising:

an obtaining process for obtaining the output recording
5 information and copy control information; and

a recording process for recording the obtained recording information and copy control information into the recording medium, without modifying the copy control information.

10 25. The information recording method according to Claim 24, wherein
in the recording process, the recording information and copy control information in conformity with the recording format into the recording medium, without modifying the copy control information, when the recording information and copy control information has been output
15 at the output speed.

26. An information output recording method including an information output method for outputting recording information as well as copy control information indicating the number of times the recording
20 information can be recorded, and an information recording method, wherein

said information output method comprises:

a multiplexing process for multiplexing the copy control information and the recording information, said copy control information
25 indicating said number of times to be indicated after said recording in the recording information apparatus is completed;

an output process for outputting the multiplexed recording information and copy control information at an output speed higher than a reproducing speed of the recording information from the recording medium, and

5 said information recording method comprises:

an obtaining process for obtaining the output recording information and copy control information; and

a recording process for recording the obtained recording information and copy control information into the recording medium,

10 without modifying the copy control information.

27. An information output recording method including an information output method for outputting recording information as well as copy control information indicating the number of times the recording information can be recorded, and an information recording method, wherein

15 said information output method comprises:

a multiplexing process for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and

20 an output process for outputting the multiplexed recording information and copy control information to an information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium, and

25 said information recording method comprises:

an obtaining process for obtaining the output recording information and copy control information to output the same to the information recording apparatus; and

a recording process for recording the output recording information and copy control information into the recording medium, without
5 modifying the copy control information.

28. The information output recording method according to Claim 27, wherein

10 said information recording method further comprises

a recognizing process for mutually recognizing the type of the devices between an obtaining device for executing the obtaining method and the information recording apparatus, and

15 in the recording process, the recording information and copy control information is recorded into the recording medium, only when it is recognized that the recording information and copy control information has been output at the higher output speed from the obtaining device, based on the recognition result in the recognizing process.

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29. The information output recording method according to Claim 27, wherein

in the obtaining process, the obtained recording information and copy control information is output to the information recording
25 apparatus at the output speed, after performing encryption processing corresponding to only the output speed.

30. The information output recording method according to Claim 29,
wherein

said information recording method comprises

5 a determining process for determining whether or not the
recording information and copy control information has been output
from the obtaining device, according to the encryption processing in the
output recording information and copy control information, and

10 in the recording process, the recording information and copy
control information is recorded into the recording medium, only when it
proves that the recording information and copy control information has
been output from the obtaining device at the higher speed, according to
the decision result in the determining process.

31. The information output recording method according to Claim 29,
15 wherein

said information recording method further comprises:

a decoding process for decoding the output recording information
and copy control information; and

20 a recording encryption process for recording the decoded recording
information and copy control information into the recording medium,
after performing the predetermined encryption processing for recording
on the information.

32. An information recording medium in which an output control
25 program recorded in a readable way by an output control computer
included in an information output apparatus for outputting recording
information as well as copy control information to an information

recording apparatus for recording the recording information and copy control information into a recording medium, said copy control information indicating the number of times the recording information can be recorded, wherein the output control program causes the output control computer to function as:

a multiplexing device for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and

an output device for outputting the multiplexed recording information and copy control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium.

33. The information recording medium according to Claim 32, wherein the information recording apparatus records the output recording information and copy control information into the recording medium, without modifying the copy control information.

34. The information recording medium, according to Claim 32, wherein

the copy control information indicates that further recording is prohibited after said recording in the information recording apparatus is completed.

35. The information recording medium, according to Claim 32, wherein

the output device outputs the multiplexed recording information and copy control information to the information recording apparatus through an electric communication line.

5 36. The information recording medium, according to Claim 35, wherein

the electric communication line is at least any one of the Internet line, a ground wave digital line, a satellite communication line, and a cable television line.

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37. The information recording medium according to Claim 32, wherein

the output control program causes the output control computer to further function as a converting device for converting the multiplexed recording information and copy control information into a recording
15 information and copy control information in conformity with a recording format used for recording the information into the recording medium in the information recording apparatus, to output the converted information to the information recording apparatus, when outputting the multiplexed recording information and copy control information to the
20 information recording apparatus at the output speed.

38. An information recording medium in which a recording control program recorded in a readable by a recording control computer included in the information recording apparatus for recording copy
25 control information and recording information into a recording medium, said copy control information and recording information output from an information output apparatus for outputting the recording information

as well as the copy control information indicating the number of times the recording information can be recorded, to the information recording apparatus, said information output apparatus comprising: a multiplexing device for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is completed; and an output device for outputting the multiplexed recording information and copy control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium, said recording control program causes the output control computer to function as:

- an obtaining device for obtaining the output recording information and copy control information; and
- 15 a recording device for recording the obtained recording information and copy control information into the recording medium, without modifying the copy control information.

39. The information recording medium according to Claim 38, wherein the recording device records the recording information and copy control information in conformity with the recording format into the recording medium, without modifying the copy control information, when the recording information and copy control information has been output at the output speed.

40. A computer data signal embodied in a carrier wave and representing a sequence of instructions, which is executed by a output

control computer included in an information output apparatus for outputting recording information as well as copy control information to an information recording apparatus for recording the recording information and copy control information into a recording medium, said
5 copy control information indicating the number of times the recording information can be recorded, said instructions comprising the steps of:

multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information
10 apparatus is completed; and

outputting the multiplexed recording information and copy control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium.

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41. The computer data signal embodied in a carrier wave and representing a sequence of instructions according to Claim 40, wherein

the information recording apparatus records the output recording information and copy control information into the recording medium,
20 regardless of the content of the copy control information.

42. The computer data signal embodied in a carrier wave and representing a sequence of instructions according to Claim 40, wherein

the copy control information indicates that further recording is
25 prohibited after said recording in the information recording apparatus is completed.

43. The computer data signal embodied in a carrier wave and representing a sequence of instructions according to Claim 40, wherein

the output device outputs the multiplexed recording information and copy control information to the information recording apparatus
5 through an electric communication line.

44. The computer data signal embodied in a carrier wave and representing a sequence of instructions according to Claim 43, wherein

the electric communication line is at least any one of the Internet
10 line, a ground wave digital line, a satellite communication line, and a cable television line.

45. The computer data signal embodied in a carrier wave and representing a sequence of instructions according to Claim 40, wherein

15 said instructions further comprises the step of

converting the multiplexed recording information and copy control information into a recording information and copy control information in conformity with a recording format used for recording the information into the recording medium in the information recording apparatus, to
20 output the converted information to the information recording apparatus, when outputting the multiplexed recording information and copy control information to the information recording apparatus at the output speed.

46. A computer data signal embodied in a carrier wave and
25 representing a sequence of instructions, which is executed by a recording control computer included in the information recording apparatus for recording copy control information and recording

information into a recording medium, said copy control information and recording information output from an information output apparatus for outputting the recording information as well as the copy control information indicating the number of times the recording information
5 can be recorded, to the information recording apparatus, said information output apparatus comprising: a multiplexing device for multiplexing the copy control information and the recording information, said copy control information indicating said number of times to be indicated after said recording in the recording information apparatus is
10 completed; and an output device for outputting the multiplexed recording information and copy control information to the information recording apparatus at an output speed higher than a reproducing speed of the recording information from the recording medium, said instructions comprising the steps of:

15 obtaining the output recording information and copy control information; and

recording the obtained recording information and copy control information into the recording medium, regardless of the content of the copy control information.

20 47. The computer data signal embodied in a carrier wave and representing a sequence of instructions according to Claim 46, wherein

the step of recording records the recording information and copy control information conformable to the recording format into the
25 recording medium, regardless of the content of the copy control information, when the recording information and copy control information has been output at the output speed.